

Bcc: Huitric, Michele[Huitric.Michele@epa.gov]
Cc: Nguyen, Vicky (NBCUniversal)[Victoria.Nguyen@nbcuni.com]
To: Wagner, Elizabeth (NBCUniversal)[Elizabeth.Wagner@nbcuni.com]
From: Huitric, Michele
Sent: Thur 6/9/2016 1:07:50 AM
Subject: Re: Interview - (TIME SENSITIVE)

Hi Liz,
Here you go.
Thanks,
Michele

QUESTION: In an email below, you said the UCSC presentation had some inaccuracies. What specifically is inaccurate?

ANSWER: The UCSC presentation left out certain relevant information; some of the key omissions include the following:

- EPA has incorporated the latest version of EPA risk models into its review process to ensure the HPNS cleanup continues to be protective of human health and the environment. EPA has reviewed the Navy's past HPNS cleanup reports, applying the current EPA risk model, and confirmed that the Navy's earlier work had achieved the cleanup level needed to protect human health and the environment.
- The Navy and EPA assessments of cleanup needs are based on scenario assumptions of exposure that are higher than realistic. In part, this is because the assumptions of exposure do not take into account the protective cover that the Navy is installing.
- EPA considers the protective range to refer to a probability that a person exposed to radioactive and chemical contaminants will have between one in ten thousand (10^{-4}) and one in a million (10^{-6}) greater chance of developing cancer. The presentation did not reflect this complete range.

QUESTION: Does the EPA agree that Superfund law requires Hunters Point must be cleaned up consistent with EPA Superfund guidance?

ANSWER: EPA creates guidance to implement laws and regulations so that programs can be implemented more consistently. If site specific conditions suggest variation from EPA guidance would be more suitable, EPA has that flexibility.

QUESTION: The UCSC team said the Navy's cleanup has been using standards that violate this requirement and that the Navy is using standards that the EPA said should not be used. Does the EPA refute this?

ANSWER: EPA incorporates the latest EPA risk models into its review process to ensure the HPNS cleanup continues to be protective of human health and the environment. EPA has reviewed the Navy's past HPNS cleanup reports, applying the current EPA risk model, and confirmed that the Navy's earlier work had achieved the cleanup level needed to protect human health and the environment.

QUESTION: The UCSC team said the EPA either didn't catch or allowed the Navy to use cleanup standards that are much more lax than what the EPA has said is protective of public health. Does the EPA refute this?

ANSWER: EPA reviews the Navy's cleanup report for each survey unit (small area of land or part of a building) of HPNS using the current version of the EPA risk model to make sure that radiation levels are within the protective 10^{-4} to 10^{-6} cancer risk range. This ensures that any land that is transferred to the City of San Francisco for new use meets appropriate levels for protectiveness with regard to radiation. To provide additional protection, the Navy is installing a protective cover over the whole site. The Navy is also developing a plan for each parcel that is transferred to the City, which EPA will review, that ensures the Navy or City will maintain and inspect the cover indefinitely.

On Jun 8, 2016, at 9:31 AM, Wagner, Elizabeth (NBCUniversal)
<Elizabeth.Wagner@nbcuni.com> wrote:

Michele,

Thanks for the statement. Please answer/clarify the following:

- In an email below, you said the UCSC presentation had some inaccuracies.

What specifically is inaccurate?

- Does the EPA agree that Superfund law requires Hunters Point must be cleaned up consistent with EPA Superfund guidance?
- The UCSC team said the Navy's cleanup has been using standards that violate this requirement and that the Navy is using standards that the EPA said should not be used. Does the EPA refute this?
- The USCS team said the EPA either didn't catch or allowed the Navy to use cleanup standards that are much more lax than what the EPA has said is protective of public health. Does the EPA refute this?

Please respond asap today.

Liz Wagner

From: Huitric, Michele [<mailto:Huitric.Michele@epa.gov>]
Sent: Monday, June 06, 2016 8:01 PM
To: Wagner, Elizabeth (NBCUniversal)
Cc: Nguyen, Vicky (NBCUniversal)
Subject: Re: Interview - (TIME SENSITIVE)

Hi Liz,

Please see below.

Thanks,

Michele

Below are answers to your follow-up questions about EPA's oversight role and the cleanup standards used at Hunters Point Naval Shipyard (HPNS).

EPA helps protect human health and the environment by managing the cleanup of hazardous waste sites across the nation. In the case of former military sites, such as HPNS, the Department of Defense is the lead for the investigation and cleanup. In overseeing the Navy's cleanup of Hunters Point, EPA's goal is to ensure that the community is protected from exposure to radiation and that the site can be used for work, recreation, and residential purposes.

Because the Navy is the lead for HPNS, EPA suggested that NBC Investigative News direct its request for an on-camera interview to the Navy. EPA has provided written information about its oversight role and remains willing to answer follow-up questions.

You asked about the Navy's reference to a 25 millirem per year standard. EPA does not express cleanup standards in terms of millirem per year, which is a dose-based approach, but instead evaluates protectiveness in terms of risk. Even though the Navy's documents reflect a dose-based approach, EPA in its oversight capacity independently reviews the Navy's cleanup reports to make sure that radiation levels are within the protective 10^{-4} to 10^{-6} cancer risk range. EPA has confirmed that the Navy's cleanup meets EPA standards.

Regarding averaging across the site, the actual exposure from radionuclides is based on looking at concentrations from multiple locations across an area, not from just a single point. Therefore, EPA is using the standard approach in the "Multi-Agency Radiation Survey and Site Investigation Manual" (MARSSIM). This approach is widely used by multiple agencies, including EPA.

The protective cover is a part of the cleanup that is required throughout the HPNS. The cover provides a physical barrier that can consist of asphalt, a soil cap at least two feet thick, or a concrete building foundation.

The EPA's risk model is called the Preliminary Remediation Goal (PRG) Calculator. More information about this model is available at this website: <https://epa->

prgs.ornl.gov/radionuclides/

Sent from my iPhone

On Jun 6, 2016, at 12:41 PM, Wagner, Elizabeth (NBCUniversal)
<Elizabeth.Wagner@nbcuni.com> wrote:

Michele,

Since the EPA will not grant an interview request and has canceled our scheduled phone call, can you please send a statement that we can include in our report? Additionally, we ask that the EPA please answer in writing the questions below for clarification purposes.

We would like to have a conversation with the EPA for clarification purposes, as well. As stated, we are under deadline and a conversation and written material needs to happen by COB today.

Please call me at 408-483-2084.

Liz

We understand that the EPA's position is that the Navy is the lead agency responsible for the cleanup and investigation of Hunters Point.

- As the government entity that is in charge of federal superfund sites and the agency that is overseeing the Navy's cleanup of Hunters Point, why would the EPA defer to the Navy?
- Can't the Navy speak about its own oversight of the Navy?

Dan Hirsch of UCSC said that in a phone call with EPA Region 9 and EPA headquarters, the officials at EPA headquarters said his analysis is correct—the region should not have used a 25 millirem per year standard or the Atomic Energy Commission's 1974 guide, and that averaging contamination across a site should not be used.

- Can the EPA confirm that the EPA headquarters agreed that these standards should not be used?
- Can the EPA confirm that the Navy shouldn't have used the standards referenced above?

We received the EPA's background information below. You said the UCSC presentation had some inaccuracies and left out some relevant information.

- What did the UCSC presentation include that was correct?
- Is the UCSC group correct in that the EPA should not have allowed the Navy to use the cleanup standards referenced above?
- Is the EPA saying that even if the Navy cleaned up to the standards referenced above, the EPA believes the risk that remains after the cleanup is still acceptable from a public health standpoint?

Isn't it true that for the cleanup of buildings and other structures, and equipment and waste, the Navy used a standard of 25 millirem per year and the Atomic Energy Commission's 1974 Regulatory Guide 1.86?

Isn't it true that EPA has repeatedly said that 25 millirem per year is not protective of public health and should not be used as a cleanup standard at Superfund sites?

- If so, why did the EPA allow the Navy to use that standard?

Isn't it true that EPA generally does not approve the use of the 1974 AEC Regulatory Guide at Superfund cleanups?

- If so, why did the EPA allow the Navy to use that standard?

Isn't it EPA's policy that Superfund cleanups at federal facilities are to employ EPA's Preliminary Remediation Goals?

- Why did the EPA allow the Navy to instead employ the non-EPA RESRAD model for estimating risk?

Isn't it true that EPA's guidance prohibits averaging contamination across an area like Hunters Point?

Please explain what the Navy's "protective cover" is.

Please explain what the each of the EPA's risk models are.

From: Huitric, Michele [<mailto:Huitric.Michele@epa.gov>]
Sent: Friday, June 03, 2016 2:40 PM
To: Wagner, Elizabeth (NBCUniversal)
Cc: Nguyen, Vicky (NBCUniversal); Huitric, Michele
Subject: RE: Interview

Hi Liz,

Please see below for information about our work at Hunters Point.

Thank you,

Michele

The Hunters Point Naval Shipyard (HPNS) is a former military base in San Francisco, California. It was used by the Navy as a naval submarine and ship repair facility from 1945 until 1974 and was also the site of the Naval Radiological Defense Laboratory from 1948 to 1969. In 1989, U.S. EPA placed the Shipyard on its National Priorities List, which is a list of federal Superfund sites in the United States.

The Navy is the lead agency responsible for the investigation and cleanup of HPNS. As part of the process, EPA and its state regulatory agency partners (the California Department of Public Health and the California Department of Toxic Substances Control) oversee and enforce Navy compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (commonly called the Superfund law) to ensure the cleanup at HPNS protects human health and the environment. The Navy and regulatory agencies work together to decide how to address the contamination. The Navy also gathers community input through a public process.

EPA uses the best available science to develop guidance for cleaning up sites, such as

HPNS, that are contaminated with radioactive materials. EPA's goal for the HPNS cleanup is to ensure that the community is protected from exposure to radiation and that the site can be used for work, recreation, and residential purposes.

EPA assesses the health effects of radiation at a site by calculating the "excess cancer risk" posed by radioactive contamination. Excess cancer risk is the additional probability that a person exposed to contamination will develop cancer over a lifetime. Superfund regulations in the National Contingency Plan have defined the protective range of excess cancer risk as a probability that a person exposed to radioactive and chemical contaminants will have between an additional one in ten thousand and a one in a million chance of developing cancer (technically known as the 10^{-4} to 10^{-6} cancer risk range). When calculating this range, EPA uses assumptions about exposure that are higher than people's actual exposure. This means that EPA overestimates risk to make sure that cleanups are sufficiently protective.

EPA reviews the Navy's cleanup report for each survey unit (small area of land or part of a building) of HPNS using the current version of the EPA risk model to make sure that radiation levels are within the protective 10^{-4} to 10^{-6} cancer risk range. This ensures that any land that is transferred to the City of San Francisco for new use meets appropriate levels for protectiveness with regard to radiation. To provide additional protection, the Navy is installing a protective cover over the whole site. The Navy is also developing a plan, which EPA will review, that ensures the Navy or City will maintain and inspect the cover indefinitely.

EPA's risk models have changed over time as radiation science continues to improve. EPA has incorporated the latest models into its review process to ensure the HPNS cleanup continues to be protective of human health and the environment. EPA has reviewed the Navy's past HPNS cleanup reports, applying the current EPA risk model, and found that the Navy's earlier work had achieved the cleanup level needed to protect human health and the environment.

University of California at Santa Cruz Presentation

On April 21, 2016, a small group of faculty and students from the University of California at Santa Cruz gave a presentation about the HPNS cleanup at an

Environmental Justice Task Force Meeting held in the Bayview-Hunters Point neighborhood. The presentation had some inaccuracies and left out some relevant information, as noted below.

The presentation criticized EPA's reliance on 2006 cleanup standards.

- In fact, EPA uses the latest version of EPA's risk model to review each Navy radiation cleanup report for individual sections of the site as they are drafted. ("Latest version" refers to whichever version is current at the time that EPA reviews each report.)

The presentation suggested that the Navy should be using standards with exposure scenarios that reflected only one end of the range that EPA considers protective.

- In fact, the Navy and EPA assessments of cleanup needs are already based on scenario assumptions of exposure that are higher than would be realistic. In part, this is because the assumptions of exposure do not take into account the protective cover. In addition, EPA considers the protective range to refer to a probability that a person exposed to radioactive and chemical contaminants will have between one in ten thousand and one in a million greater chance of developing cancer. The presentation did not reflect this complete range. Finally, the Navy routinely cleans up radiation to levels within the protective range, even with the current version of worst case scenario assumptions.

The presentation criticized the fact that the Navy's documents reference several different cleanup requirements.

- In fact, Navy cleanup documents showed requirements from multiple agencies that might apply to particular cleanups. The Navy must meet requirements specific to each of those agencies – including the most strict. Some of the standards that the Navy must meet may be less strict than EPA's, but the Navy still referenced them in the documents to show that by complying with stricter standards, they also meet other requirements. The final cleanup requirements were selected in several Records of Decision that were presented in a series of public meetings, allowed at least 30 days for public comment, and then finalized.

From: Huitric, Michele

Sent: Wednesday, June 01, 2016 10:22 AM

To: Elizabeth.Wagner@nbcuni.com

Cc: Victoria.Nguyen@nbcuni.com

Subject: RE: Interview

Liz,

The Navy is the lead agency responsible for the investigation and cleanup of the Hunters Point Naval Shipyard, so we defer to them for the on-camera request.

Once you've had a chance to see our written info, we can address your questions. Let me know if there are any questions you'd like to send in advance.

Thanks,

Michele

From: Wagner, Elizabeth (NBCUniversal) [<mailto:Elizabeth.Wagner@nbcuni.com>]

Sent: Wednesday, June 01, 2016 9:42 AM

To: Huitric, Michele <Huitric.Michele@epa.gov>

Cc: Nguyen, Vicky (NBCUniversal) <Victoria.Nguyen@nbcuni.com>

Subject: RE: Interview

Michele,

Can you please tell us why not?

I'm a little confused that we went from setting up a phone call to working toward an interview to now the agency providing written material.

We have a few very simple questions, not technical questions, for the EPA.

Liz

From: Huitric, Michele [<mailto:Huitric.Michele@epa.gov>]
Sent: Wednesday, June 01, 2016 9:25 AM
To: Wagner, Elizabeth (NBCUniversal)
Cc: Nguyen, Vicky (NBCUniversal)
Subject: RE: Interview

Hi Liz,

Thank you, but I'm afraid we are not going to be able to grant an on-camera interview at this time. We will be glad to walk through any technical questions you might have about the cleanup standards after we send the written material.

Best,

Michele

-----Original Message-----

From: Wagner, Elizabeth (NBCUniversal) [<mailto:Elizabeth.Wagner@nbcuni.com>]
Sent: Tuesday, May 31, 2016 4:45 PM
To: Huitric, Michele <Huitric.Michele@epa.gov>
Cc: Nguyen, Vicky (NBCUniversal) <Victoria.Nguyen@nbcuni.com>
Subject: RE: Interview

Thanks for your email, Michele. Please feel free to send any written material. But this request is for an on-camera interview. We are on deadline and need to do an interview this week, either tomorrow or Thursday. You had suggested that we reschedule last week's phone call on this issue for Wednesday (tomorrow). Can't we schedule an interview to discuss what we would have discussed on the phone? The public would really like to hear from the EPA. I'll call you to discuss.

-----Original Message-----

From: Huitric, Michele [<mailto:Huitric.Michele@epa.gov>]

Sent: Tuesday, May 31, 2016 4:37 PM

To: Wagner, Elizabeth (NBCUniversal)

Cc: Nguyen, Vicky (NBCUniversal)

Subject: RE: Interview

Hi Liz,

In a meeting with the Hunters Point team today, we realized that since the issue of EPA's radiation cleanup standards covers some technical ground, we'd like to start by sending you a written explanation of our work. Then if any technical questions come up for you, we can address those with you in follow-up.

We should have the written response to you later this week.

Thank you,

Michele

-----Original Message-----

From: Wagner, Elizabeth (NBCUniversal) [<mailto:Elizabeth.Wagner@nbcuni.com>]

Sent: Tuesday, May 31, 2016 2:02 PM

To: Huitric, Michele <Huitric.Michele@epa.gov>

Cc: Nguyen, Vicky (NBCUniversal) <Victoria.Nguyen@nbcuni.com>

Subject: Interview

Hi Michele,

Checking in with you regarding the interview. Can you please let us know what time Wednesday before 1p works for Lily Lee? We are also available any time on Thursday. Please call me today to discuss: 408-483-2084.

Thanks,

Liz

Sent from my iPhone